

VU Research Portal

Welfare Gains from Liberalized Banana Trade and a New International Banana Agreement

Kox, H.L.M.

1998

document version

Early version, also known as pre-print

[Link to publication in VU Research Portal](#)

citation for published version (APA)

Kox, H. L. M. (1998). *Welfare Gains from Liberalized Banana Trade and a New International Banana Agreement*. (Research Memorandum; No. 1998-12). Ontwikkelings- en agrarische economie.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:

vuresearchportal.ub@vu.nl

der Economische Wetenschappen en Econometrie

Research Memoranda

**WELFARE GAINS FROM LIBERALIZED BANANA TRADE AND
A NEW INTERNATIONAL BANANA AGREEMENT**

Henk L.M. Kox

Research Memorandum # 1998-12

April 1998

vrije Universiteit

amsterdam



WELFARE GAINS FROM LIBERALIZED BANANA TRADE AND A NEW INTERNATIONAL BANANA AGREEMENT

Henk L.M. Kox¹

Abstract

The European Union import policy for bananas grants preferential trade access for ACP bananas and discriminates against bananas from other sources. It is shown that such trade discrimination **cannot** be defended by development-related motives. As a form of aid transfer to banana-exporting ACP countries, the EU import regime is highly inefficient. The effective value of financial transfers is low, while there are large associated welfare costs to domestic consumers and to non-preferred export countries. Liberalization of banana imports would create huge welfare gains which can easily be used to compensate potential losers. It is proposed that the compensation package is given the form of an International Banana Agreement. The presence of third-party gains **from** trade liberalization can be used to negotiate non-EU involvement in the international agreement. The agreement makes it possible to reconcile a commitment to free banana trade, promotion of ecological sustainability in banana production and promotion of **socio-economic** development interests of banana-exporting countries.

Introduction

Bananas form the fifth largest tropical export crop. About 40 per cent of all exports have the European Union as destination. The European banana import regime affects many developing country producers of export bananas. This article argues that a reform of the European banana import regime could pave the road to an International Banana Agreement that reconciles market efficiency goals, development goals and environmental goals.

Most European countries have a long tradition in regulated banana import policies. Signing of the Rome Treaty which formed the basis for the European Community, was even postponed for a few days until a separate Banana Protocol was added to the Treaty. The 1992 unification of the internal European market brought a uniform European import regime for bananas. It is closely entangled with the **Lomé** Agreement between the European Union and former colonies in Africa, the Caribbean and the Pacific regions (ACP). ACP countries enjoy privileged access to the European market, mainly to the detriment of producers in Central and South America. Because a large part of Latin American banana exports is dominated by three large US companies, these exports are often adduced to as 'dollar bananas'. **Large**-scale production methods makes dollar bananas generally much cheaper than ACP-bananas.

¹The author is with the Economics Department and the Economic and Social Institute of the Free University in Amsterdam (Address: De Boelelaan 1105, 1081 HV Amsterdam, Netherlands, tel.: +3120.444.6143, fax: +3120.444.6127, email: hkox@econ.vu.nl)

Increasing friction over the current **EU** banana market regime has accumulated between the commercial parties and countries, inside and outside the European Union. The item nearly caused a trade war between the USA and the EU. After complaints by governments of dollar banana countries and the USA before WTO trade panels, the WTO Appellate Body in 1997 came with a final verdict that makes a change in European banana policy unavoidable. Also from another perspective, change is laying ahead. The current **Lomé** Agreement between the EU and the ACP countries has to be renewed in the year 2000. In its Green Paper the European Commission (1996) announced that revision of the agreement is desirable from several perspectives. The Banana Protocol of the **Lomé** Agreement which considerably constrained the **EU's** policy margin expires in December 2002. At that time also the Framework Agreement of the EU with four dollar banana suppliers expires. Therefore, institutional and legal possibilities for substantial change come into sight.

The article has the following structure. Section 2 is an attempt to disentangle the different lines of argument in the debate for revision of the present EU banana regime. In the subsequent three sections three major aspects of this debate are dealt with in further detail. Section 3 surveys the evidence on welfare costs and **benefits** of the banana regime. An important element in the discussion on the European banana policy is about the best way to help those countries which are extremely dependent on banana exports. Section 4 answers the question whether differences in economic and social development of banana-exporting countries can justify the present EU banana policy. Section 5 focuses on environmental aspects of banana production in relation to trade preferences. Section 6 launches a proposal to use potential welfare gains **from** liberalized EU banana trade in a package deal that compensates the potential losers in ACP countries. The package deal is shaped in the form of an International Banana Agreement. The final section summarizes the overall conclusions.

Overview of the banana trade controversy

Debate on the EU banana regime has been criticized from different view angles: welfare considerations, development arguments, competition policy, environmental considerations and arguments related to **labour** standards. Proposals to reform the import regime reflect the different perspectives. In order to clarify further discussion first an attempt will be made to disentangle the different threads of argument.

EU consumer welfare Many studies by now have documented and analyzed welfare costs and distributional consequences of the current banana regime. Due to the import regime, European consumers pay much higher prices and have lower banana quality. The import regime creates free quota rents which for European banana marketing companies, at the expense of consumers. Banana producers in 'dollar banana' countries are artificially put at disadvantage by the regime. Research findings on this issue will be presented in section three of this article.

Development objectives. *The* prime motivation for the present EU banana regime is that it helps poor countries whose economy is highly dependent on banana exports, i.e. the ACP exporters in general and more in particular for the Caribbean Windward Islands. The questions whether such claims are justified and whether a discriminatory import regime for bananas is an efficient instrument to serve these goals form the subject of section four of this article.

Competition policy for the banana industry. Competition policy is a subject matter that has become increasingly intermingled with discussion of the EU banana regime. Welfare analyses of the EU banana scheme are sometimes criticized, pointing at the fact that a free EU banana market will be an oligopolist market, dominated by three large US banana multinationals. However, the prime goal of the EU banana regime was not to change the market structure of the industry, but rather, to help the economies of the banana-dependent former colonies. The EU has more targeted instruments (e.g. based on articles 85 and 86 of the Rome Treaty) to intervene in case of market power abuse by large banana **companies**.² Even with an oligopolist market structure, market prices for bananas in open markets (USA, Germany before 1993) have been far lower than in the regulated EU market.

Environmental issues. A further line of argument in the debate on the EU banana policy relates to environmental considerations. ACP bananas, particularly those from smallholders in the Caribbean region, are generally produced in an environmentally more sustainable way than bananas from large estates in the dollar banana countries. Ecological sustainability in the latter case is often threatened by large amounts of pesticides which end up in the local environment, causing harm to humans, wildlife, local ecological systems. In smallholder banana production little or no pesticides are used, due to the costs of such inputs and due to lower pest incidence in small-scale, inter-cropped production systems. Mono-crop banana plantations are more pest-prone, while the companies' desire to meet premium consumer demand for long, unblemished bananas leads to additional use of chemical pesticides and growth regulators. The productivity gap between ACP smallholder production of bananas and **large-scale** production in 'dollar banana' plantations might shrink when negative environmental externalities caused by banana production were taken into account. However, it does not follow that dollar bananas should receive a less preferential treatment in EU banana policy. Most environmental externalities caused by banana production are local externalities, without massive transborder welfare effects. If local environmental externalities dominate the scene, policy primacy should rest with local or national governments in the producer countries, rather than with the European Commission. If EU consumers prefer bananas which are produced in an environmentally sound way, then it does make sense to arrive at voluntary ecolabelling schemes for bananas. Some are already in operation in the EU. They create a

² Effectiveness of these instruments has been shown in 1973 and in 1992 with regard to market power abuse by Chiquita.

basis for product differentiation and price premiums for bananas (from ACP countries or elsewhere) which have been produced in an ecologically sound way.

Arguments related to labour standards. Some proposals for reform of the EU banana import regime suggest that more weight should be given to minimum social standards in banana production. Particularly the banana multinationals have a long record of union-busting and denial of workers' rights in banana-producing **countries**.³ Their plantation labourers have widely suffered from health hazards (diseases, infertility, lethal accidents) related to the excessive use of agrochemicals in large-scale banana production. Central American banana estates have used pesticide types like DBCP of which application has long been forbidden in their countries of **origin**.⁴ Epidemiological research shows disquieting results. The incidence of workers suffering pesticide intoxication is estimated to be 3 per cent of the working population in all developing countries. For Costa Rica in general it is 4.3 per cent, while for the banana region in Costa Rica, **Región Huetar Atlántica**, it is 6.6 per cent (Anon., 1992a; Hemandez and **Witter**, 1996: 175). Because of these intolerable working conditions and **labour** practices, it has been proposed to apply social minimum criteria in European trade preferences for bananas (**WINFA**, 1997). However justified the social claims by plantation workers in dollar banana countries may be, their position is only indirectly related to the EU import regime for bananas. The companies often stress that they operate according to national legislation of the production countries. If this is not the case, then banana worker unions may of course sue them in local courts. When unions find insufficient support for their rightful claims in national legislation, then the most obvious step is to undertake political action to improve such legislation. International support **from** trade unions which organize workers in other parts of these vertically-integrated banana companies is the next step; this is the very task of international **labour** union organizations. Since banana companies with own brand names are very keen to avoid a negative consumer imago, banana worker unions may well strengthen their case by joining with consumer organizations and **NGOs** in EU import markets. It is neither obvious nor necessary that these issues be linked to a reform of the EU banana regime. Indeed, it can be argued that job opportunities of plantation workers will increase due to a liberalized banana trade. Improved bargaining positions vis-i-vis their employers may lead to higher wage levels, improved **labour** union rights and better **labour** conditions.

³ Recent cases are documented in: Banana Trade News Bulletin; Mokhiber & Wheat (1995); Verburg (1998); Chambron & Smith (1998).

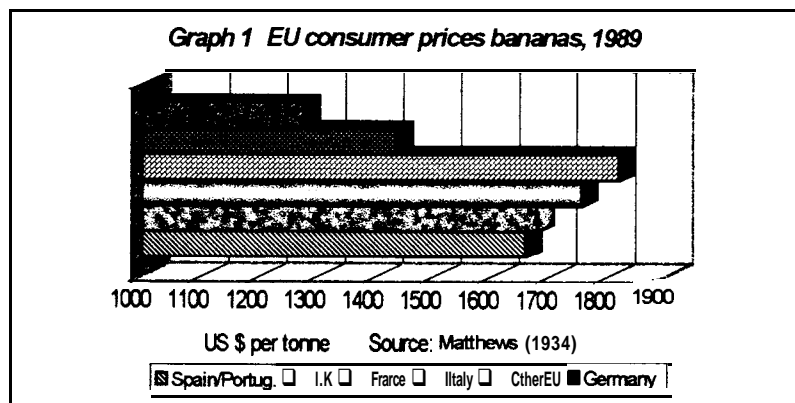
⁴ Although domestic use of the highly toxic pesticide DBCP was forbidden in the USA in 1977, it has been widely applied by the US banana companies during the period between 1965 and 1990. These companies now have been named in class action lawsuits on behalf of more than 10,000 banana workers in 11 developing countries. The banana worker suits allege that as early as 1961, research by Dow Chemical and the University of California indicated that DBCP is highly toxic, and that its vapours alone can do damage to sperm cells, livers and kidneys (cf. Mokhiber & Wheat 1995). The companies which produced the chemical have offered an out-of-court settlement (Banana Trade News Bulletin, Nov. 1997).

Conclusion. The European import regime for bananas has become subject of lobby activities by various parties. **Labour** standard issues, competition policy arguments and environment-related arguments cannot form justified motives for further trade discrimination. The real issues which deserve further analysis are welfare effects of the import regime and the validity of development-related considerations which motivate the present policy. Voluntary ecolabelling schemes for bananas could well become part of the compensation package for potential losers of a liberalized European banana trade. These issues will subsequently be dealt with in greater detail.

Welfare analysis of the present EU banana regime

Welfare analysis of a policy makes it necessary to identify relevant parties and their welfare interests. Some will gain and others will lose when the EU banana import regime is reformed. Table 1 lists welfare positions of producers, traders, consumers and governments. I will be used as a vantage point for a more detailed discussion.

Consumer **interests**. In money terms, the largest welfare concerns European consumers. They pay much higher banana prices than they would have had to pay with completely **free** trade. The reference point can be the German banana market where imports were completely free before 1 993.⁵ Other countries (Benelux, Denmark, Ireland) till then applied a uniform 20% tariff on banana imports, or used a combination of import quota and **tariffs** (UK, France, Italy, Spain, Portugal) Portugal and Greece).



Import quotas were used to grant preferential trade access for former colonies in Africa and the Caribbean. Some countries also used quotas to preserve part of their national markets for domestic but expensive production of bananas: Spain (from Canary

Islands), Portugal (Madeira), Greece (Crete), France (Guadeloupe, Martinique). Pre-1993 differences in consumer prices for bananas are shown in Graph 1. Consumers in countries that applied both tariffs and quota paid the highest prices for bananas, followed by those that just applied a simple import tariff, with consumers in the open German market paying the lowest price. It is worth noting that price in

⁵ Also Sweden, Austria and Finland had open banana markets before their entry in the EU. Germany had negotiated free banana imports in a special protocol of Rome Treaty.

Germany were lowest even though the German market was and is dominated by large oligopolist banana companies.⁶

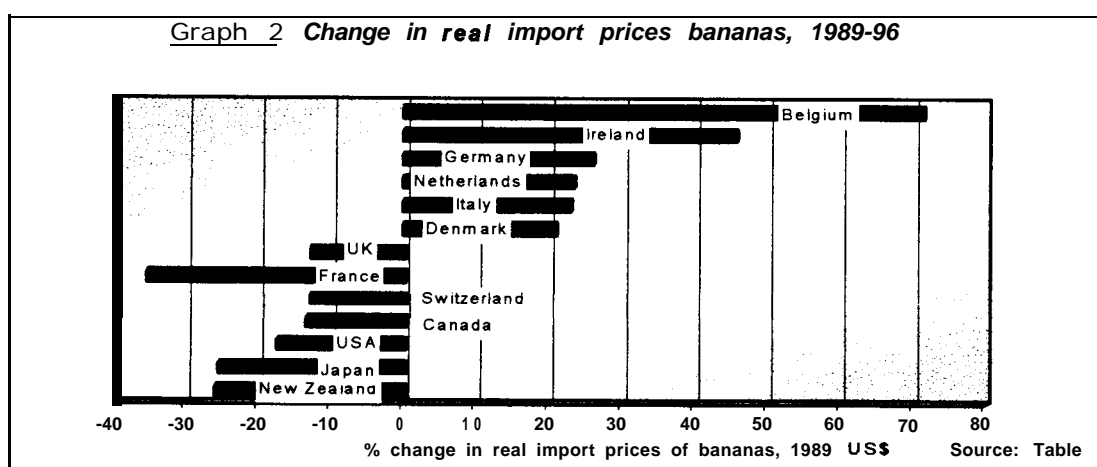
Table 1 Dominant welfare positions with regard to liberalized EU banana imports

"Player" groups	Dominant parties	Main welfare interests
Consumers	EU consumers	<ul style="list-style-type: none"> Price level of bananas Banana quality Concern on ecological sustainability and social conditions
	US consumers	<ul style="list-style-type: none"> Effect of EU banana regime on US consumer price Banana quality Concern on ecological sustainability and social conditions
Producers	Producers of the Windward Islands	<ul style="list-style-type: none"> Trade opportunities in EU Income and employment opportunities from banana exports
	independent banana producers in dollar banana countries	<ul style="list-style-type: none"> Trade opportunities in EU Profits from banana exports to EU
	Producers in the non-Caribbean ACP countries	<ul style="list-style-type: none"> Income and employment opportunities from current banana exports to the EU
	European producers and French 'oversea territories'	<ul style="list-style-type: none"> Income and employment opportunities arising from bananas produced under the Common Agricultural Policy of the EU income and employment opportunities arising from bananas
	Large vertically-integrated banana companies specialized in 'dollar bananas'	<ul style="list-style-type: none"> Market access to EU countries; Capacity use in their 'dollar banana' production; Additional investment in ACP banana production; Price war in non-EU markets (predominantly USA); Obtaining a share in lucrative European quota rents
Traders	Banana trading companies which market ACP bananas in the EU	<ul style="list-style-type: none"> Market share in EU Profits from (free) quota rents Investment in dollar banana countries to meet market demand under EU import licenses
Governments	EU Commission and EU governments	<ul style="list-style-type: none"> Food cost levels for EU consumers Revenue collection from import tariffs and quota rents Bureaucratic costs of implementing current EU banana regime Goals of EU development policy Reform of EU common agricultural policy Renewal and revision of Lomé Agreement
	Governments ACP countries	<ul style="list-style-type: none"> Direct incomes generated by banana exports to EU Positive economic externalities of banana exports Export diversification opportunities Trade and aid benefits under the Lomé Agreement
	US government	<ul style="list-style-type: none"> Protection of profit interests of US banana multinationals Low banana prices for US consumers Control of immigration from the Caribbean Control of drug imports from the Caribbean region Political stability in the Caribbean

⁶ Deodhar and Sheldon (1995) show that the German banana market was and is not a fully competitive market, but they found no evidence that oligopolist firms applied collusive dump pricing methods. Moreover, US prices are even considerably lower than German prices. Therefore, German banana prices before 1993 can well be taken as a approximation of prices under an open trade regime.

Many estimates are available of the welfare costs for EU consumers, using different models, assumptions and base years. Annex Table A2 presents eight of these estimates. The combined **annual** welfare loss for EU consumers is estimated to be in the range between 579 **mln** and 1600 **mln** US dollar. This is the amount that could be gained when in 1993 the European banana trade would have been liberalized.

However, the EU in 1993 decided for a uniform European banana import regime built on **origin**-dependent quota, tariffs and import licenses. European and ACP bananas were given preferential trade access with a quota level higher than what these producers delivered up to then. Remaining import demand could be provided by other countries under a uniform import tariff (100 ECU/ton).⁷ Because of the different national banana policies, introduction of the policy package had a differentiated effect on consumers in EU member countries. The largest welfare loss fell upon German consumers. Several estimates of their combined loss are presented in Annex Table A1, using different assumptions and estimation methods. The estimates quantify the welfare loss for German consumers between 106 **mln** and 800 **mln** annually. Put otherwise, this is approximately *the welfare gain for Germany* that could be achieved by again converting EU import policy to an open trading system. All estimates agree that the 1993 banana regime had the most positive effect on consumer welfare in France and the UK, which formerly had the most policy-distorted banana markets. Graph 2 shows that these countries experienced a **fall** in real import prices compared to prices in 1989. The same happened in Spain, Portugal and Greece (not shown in graph 2).⁸



Real import prices increased in all other EU countries. Estimates of the overall welfare effects for EU consumers give mixed results, depending on the applied model, the underlying assumptions and the

⁷ Further details can be found in EC Council Regulation 404/93 and in Hallam and Peston (1997: 8-13).

⁸ Note that import prices do not coincide with consumer prices, because of trade margins and because some EU countries have an 'own' banana production (Greece, Spain, Portugal, France).

choice of reference period. Borell (1994; 1997) estimates that the total welfare loss for European consumers increased due to the 1993 reform, from 1600 mln to 2300 mln US dollar. Guyomard et al. (1996) also found an increase, but only by a negligible 2 mln US dollar, while Euro PA (1995) estimated that the total European welfare cost due to the reform decreased by 600-800 mln US dollar.

In a forward-looking perspective it is only interesting which welfare gains for EU consumers can be accomplished by liberalizing banana trade. Comparison of banana import prices with those prevailing in non-EU countries yields a first approximation of the potential gains. In Table 2 current and historical import prices are related to those in the USA. It appears that in 1996 EU import prices are generally double those prevailing the USA; only part of this difference can be explained by transport costs. The

Table 2 *Comparison of banana import prices, EU and other OECD countries 1989-96*

Country	1996 aver. import price ^{a)} in US\$/ton	Price ratio 1996 (USA=1 00)	1989 average import price ^{a)} in US\$/ton	Price ratio 1989 (USA=1 00)	Real price increase ^{b)} in %, 1989-96
non-EU countries					
USA	365	100	356	100	-17.3
Canada	428	117	398	112	-13.3
New Zealand	465	127	506	142	-25.8
Japan	531	145	573	161	-25.3
EU countries					
France	632	173	788	221	-35.3
Italy	709	194	466	131	22.8
Germany	750	205	482	135	25.7
Un. Kingdom	759	208	701	197	-12.7
Ireland	761	208	422	118	45.5
Denmark	791	216	528	148	20.8
Netherlands	801	219	524	147	23.2
Belgium	880	241	414	116	71.3

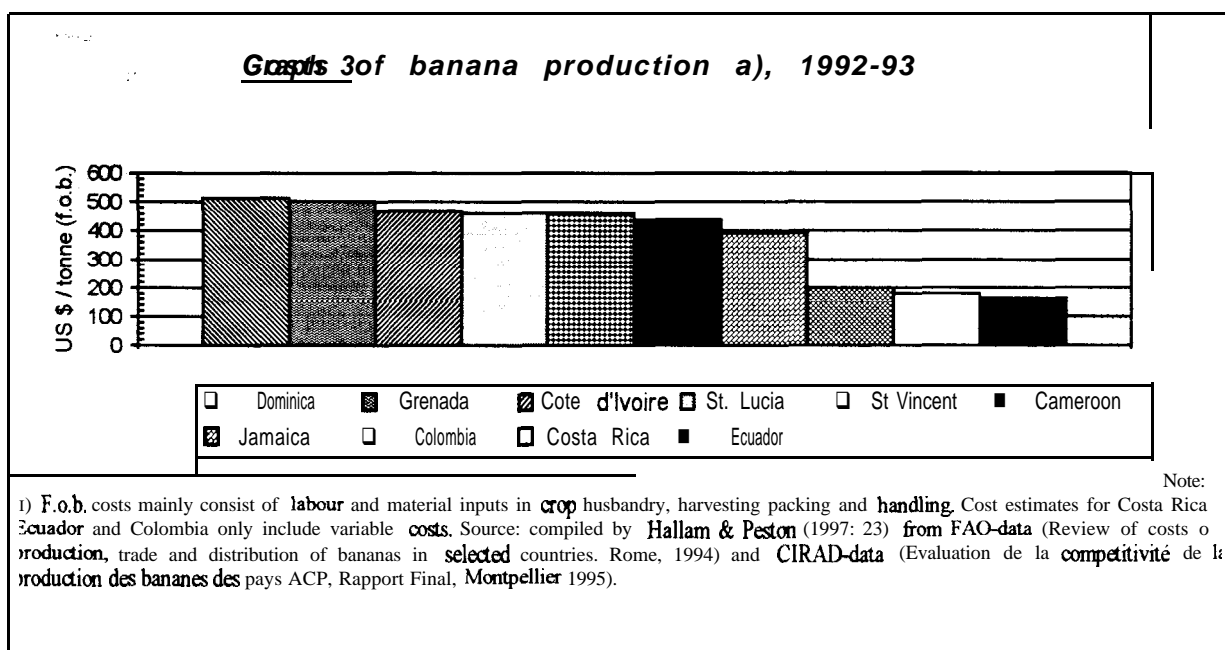
Notes: a) Average import unit values for bananas from all sources. b) Nominal 1996 import prices have been converted in constant 1989 US dollars by the deflator for the US GDP. Data sources: import data from UNSD COMTRADE database, Geneva; deflator for US GDP is from IMF, International Financial Statistics.

price difference with the USA and other OECD countries with open banana import regimes has clearly deteriorated since 1989. Given these price differences, it should not come as a surprise that all estimates of the welfare effect for EU consumers in case of liberalized banana trade, show a huge potential gain, ranging from 800 to 2300 mln US\$ (cf. Annex Table A2). It should not be too difficult to compensate potential losers of liberalized trade from such a huge amount. Matthews (1994: 19-21) calculated that a combination of liberalization with full financial compensation to bananaexporting ACP countries (340 mln ECU) would still yield a net welfare surplus for European consumers (126 mln ECU).

A liberalized EU banana trade may also affect consumers in the USA and other import countries. In the short term they might see banana prices go up; and this effect may last until production capacity has

adapted to higher EU import levels. This future course of events results from standard international trade theory. When a large import country like the EU opens up its markets, this causes world market shortages (at least temporarily) which push up the world market **price**.⁹ Adaptation of banana supply capacity by large companies could be relatively fast, because they have the short-term possibility to diminish the share of rejected sub-standard bananas.

Producer interests. Together, world banana producers would benefit from EU trade liberalization. Total world demand levels would go up, and also world market prices for bananas increase, at least in the short to medium term until production capacity has been adapted. The largest gains in banana exports will be booked by the most competitive producers, i.e. the producers in dollar banana countries. Dominant producers in this region still are the US banana multinationals, but national producers like



Noboa (Ecuador) have expanded fastly. The position of US banana multinationals has somewhat changed since the early 1990s, since they have built up production capacity in African ACP countries and in Europe (Dole), in order to be eligible for lucrative EU import **licenses**.¹⁰

ACP producers lose their preferred trade access to the EU. Since **their** cost price levels are much higher than in case of dollar banana producers (cf. Graph 3), they may not be able to benefit from larger EU demand. Worse, they probably lose considerable parts of their current EU import shares (e.g. **Ross-**

⁹ The opposite happens when a large country imposes tariffs and quota (see e.g. Krugman and Obstfeld, 1994; Deardorff, 1994). The price decrease in non-EU countries between 1989 and 1996 as shown in Graph 2 and Table 2 reflects increased protectionism in the EU, although improved productivity in banana production may also explain part of the price fall.

¹⁰ Moreover, in Latin America they increasingly leave banana production to outgrowers, national companies who run the plantations and supply bananas on a contract **basis**.

Robinson, 1997). Smallholder banana producers in high-cost ACP countries, like the Caribbean Windward Islands, form the most periled group of producers. High cost prices of their bananas are partly related to small plot sizes and hilly terrains.

Banana producers in the EU or in so-called 'overseas territories' will also be **affected** negatively by an open EU banana market, since these producers are mostly high-cost producers. Their income position is, however, less in peril because they are entitled to deficiency payments under the EU Common Agricultural Policy, and possibly also under the **EU's** regional development programmes. These payments will compensate income shortfalls and facilitate investment in a broadened production base.

Traders' interests. Trading companies which market ACP bananas in the EU have been among those who benefited most of the 1993 policy reform. European traders were granted free import licenses for the formerly open EU countries (new market area), whereas they were also allowed to market 30% of all dollar bananas (new product) alongside their traditional trade in ACP bananas. Allotment of dollar banana licenses led to vocal protests by US banana companies backed by the US **government**. The protest culminated in threat of US trade retaliation, and in a WTO panel procedure. In 1997 the Appellate Body of the WTO decided that the EU should alter its quota allocation system.

Government interests. The European Commission's policy margin with respect to banana imports is constrained by obligations following from international treaties (**Lomé**, Framework Agreement with Latin American banana producing countries, WTO). EU policy concerns with respect to a liberalization of banana imports include consumer welfare, development policy, implementation costs and tax receipts. Development aspects of the EU trade regime are dealt with in next section. The present banana import system requires detailed market intervention with specific tariff quota for specific economic activities like producing and purchasing, transport and ripening of bananas." The associated bureaucracy costs are high. Most of such costs are avoidable in an open market system combined with direct aid transfers. Banana import taxes are now collected on dollar banana imports. Complete liberalization mean that these import levies are foregone; the loss will be partly compensated by higher receipts of value-added taxes.

Caribbean governments have repeatedly stressed that banana exports to the EU are a lifeline for their economies, claiming that ■ without these exports ■ their economies will collapse. According to them considerable parts of agricultural employment and incomes would disappear due to EU import liberalization, while a large share of total foreign exchange earnings would be lost (cf. CBEA, 1997/98).

¹¹ E.g. quota redistribution was found necessary each time that production of Caribbean Windward Islands was hit by tropical hurricanes.

Opposite claims have been voiced by governments of dollar banana countries: an open EU market would increase their agricultural jobs and incomes, while their export earnings would increase.

The US government so far has primarily chosen to represent the position of US banana companies, rather than appreciating the **fact** that the EU banana policy has (unintentionally) lowered banana prices for US consumers or that it has contributed to economic and social development in the Caribbean. The US government has also stated that their other interests in the banana trade conflict include: maintaining political stability in the Caribbean, controlling immigration and drug trade from this region. It has therefore announced its willingness ‘to work with the EU to help the Caribbean producers in a way that does not hurt US companies and Latin American producers’ (USTR, 1996).

Conclusions. The largest gains from EU trade liberalization will be recorded by European consumers, followed by the most competitive world market producers, i.e. those in dollar banana countries. **High-cost** ACP producers like the Windward Islands and privileged European traders stand to lose most.

Development contribution

The major objective of EU banana policy has been the promotion of social and economic development in ACP countries. The relevance of this development goal, and the effectiveness of the banana import regime in achieving it, will be investigated on the basis of the following questions:

- Are banana-exporting ACP countries less developed than dollar banana countries?
- Are ACP economies more dependent on banana exports than dollar banana countries?
- Do ACP countries have other weaknesses in their external economic relations compared to dollar banana countries?
- Do trade preferences boost social and economic development?
- Are trade preferences a necessary instrument to boost social and economic development?
- Are trade preferences an efficient instrument for transfer of development aid?

Starting with the first question, Table 3 brings together a number of development indicators for both country **groups**.¹² Each country group appears to consist of poor and relatively better-off countries. The group of ACP banana falls apart in two subgroups, the Caribbean and the **African** countries. Caribbean countries have relatively high levels of real income per capita. The first six of them have income levels comparable with or higher than European countries like Poland, Bulgaria, Romania and most former member states of the Soviet Union. The **UNDP’s** Human Development **Index** data also indicate that most Caribbean states are in the category most developed countries. The story is quite different with

¹² In **terms** of population size, the group of African countries is by far the largest (28 mln.); the first six Caribbean countries in Table 3 have a combined population of one million, while Jamaica and the Dominican Republic together count ten million people.

Table 3 *Development characteristics of countries exporting bananas to the EU*

Country	Real GDP per capita (PPP \$), 1994	Human Develop- ment Index, ^{a)} 1994	Daily calorie supply per capita, 1992	Adult literacy rate, 1994	Life expect- ancy at birth, 1994	% of popula- tion in poverty, ^{b)} 1989-94	Human Poverty Index, ^{c)} value (%), 1990
ACP countries							
Dominica	6118	0.873	..	94.0	72.0	30 ^{d)}	..
Grenada	5137	0.843	2407	98.0	72.0
Saint Lucia	6182	0.838	..	82.0	71.0	25 ^{d)}	..
Saint Vincent	5650	0.836	..	82.0	72.0
Belize	5590	0.806	2670	70.0	74.0
Surinam	4711	0.792	2548	92.7	70.7
Jamaica	3816	0.736	2607	84.4	73.9	5	12.1
Dominican Republic	3933	0.718		81.5	70.0	20	18.3
Cameroon	2120	0.468	1981	62.1	55.1	..	31.4
Côte d'Ivoire	1668	0.368	2491	39.4	52.1	18	46.3
Dollar banana countries							
Costa Rica	5919	0.889	2889	94.7	76.6	19	6.6
Panama	6104	0.864	2239	90.5	73.2	26	11.2
Colombia	6107	0.848	2678	91.1	70.1	7	10.7
Ecuador	4626	0.775	2587	89.6	69.3	30	15.2
Honduras	2050	0.575	2306	72.0	68.4	47	22.0
Guatemala	3208	0.572	2255	55.7	65.6	53	35.3
Nicaragua	1580	0.530	2296	65.3	67.3	44	27.2

Notes: a) The HDI is a combined index of real purchasing power per capita, life expectancy at birth, education (adult literacy and school enrollment). Countries are ranked between 1 (best) and 0 (worst). b) Percentage of the population living at an income of \$1 per day or less. c) Combined index for the percentage of the population without access to safe water, health services, mortality expectation below the age of 40, adult illiteracy and the percentage of underweight children under age five. The index ranges from 0 (no deprivation) to 100 (deprivation for total population). d) Percentage of population under national poverty line, according to Internet site of Caribbean Banana Exporters Association. Data sources: UNDP (1997), World Bank (1997).

regard to Cameroon and Côte d'Ivoire which have much lower income levels, while also performing poorly on other development criteria. The three first dollar banana countries in Table 3 also do well on most development criteria. Slightly worse is the situation in Ecuador, and much worse in Nicaragua, Guatemala and Honduras where large parts of the population remain in extreme poverty. Development in the latter three countries is between that of Caribbean and African ACP countries. It can be concluded that development levels neither generate an objective criterion for trade discrimination against dollar banana countries, nor do they generate an objective reason for granting generic trade preferences to ACP countries.

A further question is whether ACP countries are more dependent on banana exports than dollar banana countries. Table 4 presents indicators on export-dependency. It is shown that in only three countries banana exports contribute ten per cent or more to domestic income: Dominica, St. Lucia and St. Vincent. These island economies depend for more than half of their total exports on banana exports to the EU. Export dependency is also high in Belize. All other ACP countries have a more diversified

Table 4 *Bananas and export dependency*

<i>country</i>	Banana exports to EU as % of total exports, 1995 ^{a)}	Exports as % of GNP, 1994	Banana exports as % of GDP, 1993/1994 ^{c)}
<u>ACP countries</u>			
Dominica	56	24 ^{b)}	11.9
Grenada	3	10 ^{b)}	0.9
Saint Lucia	76	19 ^{b)}	10.2
Saint Vincent	58	25 ^{b)}	9.7
Belize	20	20 ^{b)}	2.3
surinam	6	23 ^{b)}	3.2
Jamaica	5	63	0.8
Dominican Republic	7	25	0.1
Cameroon	6	30	0.7
Côte d'Ivoire	3	47	0.7
<u>Dollar banana countries</u>			
Costa Rica	19	41	6.0
Panama	42	110	2.9
Colombia	5	19	0.7
Ecuador	13	27	3.4
Honduras	9	41	6.5
Guatemala	3	20	0.8
Nicaragua	4	25	0.3

Notes: a) ACP export dependency calculated by **Verburg** (1998:5) on basis of FAO and **Eurostat** figures. Estimates for other countries based on Dollar Banana Trade News Bulletin (Nov. 1997) and UNCTAD (1996b). b) Estimate based on CL4 World **Factbook** 1996. c) Total banana exports from UNCTAD (1996a). d) estimate for 1995. Other data sources: **Eurostat** (1997), World Bank (1996; 1997); OECD (1996); UNCTAD (1996a; 1996b).

export and production structure. In the poorest ACP countries banana exports contribute less than one per cent to domestic income. Only three to seven per cent of their total export earnings stems from banana exports to the EU. The contribution of banana exports to domestic income in Honduras, Costa Rica, Ecuador and Panama is three to eight times higher than in most ACP countries. Of all dollar banana countries, EU imports have the highest contribution to domestic income in Panama and Costa Rica. Summing up, economic dependency on banana exports to the EU is highest in the three Windward Islands, followed by Panama and Costa Rica. Differences between the rest of the countries in Table 4 are relatively small. Motives related to export dependency cannot form a valid reason for a discriminator

Trade preferences could perhaps be warranted when the balance of payments of ACP countries had structural weaknesses in comparison with dollar banana countries. Table 5 presents a number of indicators on non-trade sources of convertible foreign currency. The last column shows the percentage of exports earnings that again leaves the country in **the** form of debt-servicing obligations (interest and repayment of loans). As far as data are available, no systematic difference appears to exists between ACP countries and dollar banana countries. Development aid flows appear to contribute more to GNP in ACP economies than in dollar banana countries. Foreign direct investment in most cases contributes

more to the economies of ACP countries than to that of dollar banana countries. Column 4 indicates that the wealthiest dollar banana countries have more access to international private capital markets. Commercial finance (bank loans and export credits) **from** this source is **non-concessional** and implies future debt-servicing obligations. Even though some dollar banana countries have more access to the international market for commercial credits, it can be concluded that ACP countries do not lack alternative non-trade sources of foreign exchange. These data do not support claims that ACP countries have a stronger relative dependency on export earnings **from** bananas.

Table 5 *Capital flows and non-trade sources offoreign currency*

Country	Total net official development assistance received ^{a)} 1995, (3) as % of GNP (1)	Net foreign direct investment as % of GNP. 1993 (2)	Total net official development assistance received ^{a)} 1995 in US\$ mln (3)	Private flows from all DAC countries ^{b)} 1995 (mlnUS\$) (4)	Debt service ratio (debt service as % of exports), 1994 (5)
<u>ACP countries</u>					
Dominica	12.1	5.0	24	134	..
Grenada	4.2	9.2	10	-9	..
Saint Lucia	9.6	7.1	47	12	.
Saint Vincent	20.5	13.4	47	-11	.
Belize	3.0	1.8	16	-3	
Surinam	27.6	-10.4	77	155	..
Jamaica	2.7	2.3	108	252	21
Dominic. Rep.	1.2	2.0	124	229	17
Cameroon	6.5	2.1	444	-167	17
Côte d'Ivoire	22.0	0.4	1200	-20	40
<u>Dollar banana countries</u>					
Costa Rica	0.3	3.9	25	319	15
Panama	0.8	-0.6	50	3433	35 ^{d)}
Colombia	3.7	1.6	231	1604	30
Ecuador	1.5	0.9	235	917	22
Honduras	14.1	1.1	411	-12	34
Guatemala	1.3	1.6	215	22	11
Nicaragua	48.1	2.7	662	-57	38

Notes: a) Net disbursements of ODA **from** all sources. b) Private flows include direct investment, portfolio investment, bank loans and export credits. Data sources: World Bank (1996, 1997); OECD (1997).

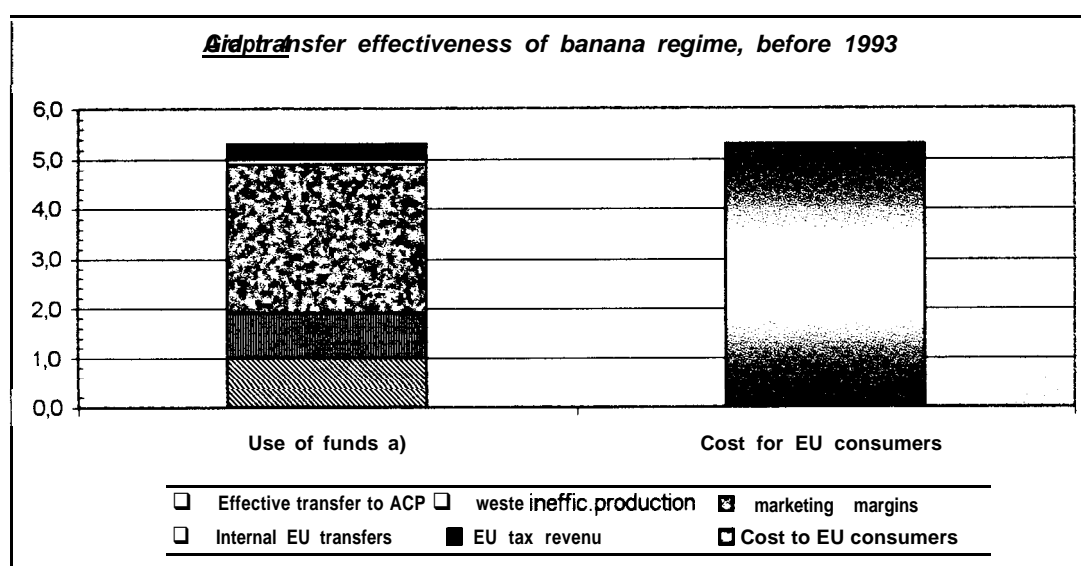
Trade preferences may operate like a producer subsidy **from** abroad. Development economics literature suggests that producer subsidies can be warranted in two cases. The first case regards producers in a start-up phase when it is not yet possible to reap the commercial **fruits** of initial investments, economies of scale and learning-by-doing. This is the so-called infant *industry* argument. When producers have no access to commercial loans to finance their start-up phase, governments could subsidize them to bridge the period before they have gained commercial viability and can face market competition by themselves. For this argument to be valid, a pre-fixed time schedule for phasing out the subsidies (preferences) is

required. Without it, the subsidies or preferences become a form of open-ended ‘socializing’ of private losses. Former European colonies have been granted preferential trade access for bananas since the **very** start of the European Community. Graph 3 has, however, shown that production costs in many ACP countries are still far from competitive. **After** so many years, preferences (subsidies) to these producers can no longer be defended with the infant industry argument. When no incentives or real possibilities exist to make producers more efficient and competitive, endless subsidy (preference) schemes will be required.

The second case for producer subsidies exists when banana production generates positive external effects for other sectors of the economy. Positive externalities occur for instance when banana production creates environmental benefits, supports **labour** training, contributes to basic agricultural research, or makes communication, transport or infrastructure available to the rest of the economy. The fact that these positive external effects cannot fully be commercially exploited by banana producers themselves, could then lead to a lower production level than is socially desirable. In that case, governments may subsidize production till it has reached a socially preferred level. By granting trade preferences for this motive, the EU Commission puts itself in the role of the government in the country where the positive externalities arise. In the Caribbean region, banana exports may well generate positive externalities for the economy in the form of lower shipping costs, because banana reefers offer spare transport capacity at relatively low freight costs (e.g. **Hallam & Peston**, 1997). **Other** economic sectors benefit from this advantage as well. Environmental benefits (tree crop cover on erosion-prone slopes) and the crop’s role in supporting rural production systems could perhaps also be considered as positive externalities. The presence of positive externalities has to be assessed case by case, and could warrant the use of subsidies for banana producers. Generic trade preferences form a much too **broad-**spectred instrument for this fine-tuning job. The positive externality created for the Windward Island by the presence of the banana shipping services could be captured by subsidizing the shipping lines with EU aid for the continuation of their services.

Improvement of competitiveness and diversification form essential elements of economic development in high-cost mono-export economies. Sticking to traditional primary export products may block dynamic incentives for economic growth. Primary exports seldom form dynamic growth sectors in developing country economies and growth impulses mostly come from labour-intensive manufacturing exports (e.g. Fosu, 1996; Kox, 1997; Sachs and Warner, 1995). Therefore, subsidizing a stagnant primary sector may well have high opportunity costs in terms of missed growth opportunities. Trade preferences generate additional income for banana traders and producers, but investment in diversification need not come from these agents. Inadequate development of infrastructure like roads, port facilities and communication links has been established to be a major bottleneck for diversification in the Eastern

Caribbean region (FAO, 1996). Governments, rather than the banana sector, has to undertake investments in roads, ports, industrial estates and education programmes that can form the basis of new export activities. Therefore, direct EU aid to governments would probably be more effective in supporting diversification of exports and production than indirect price subsidies to the banana sector. Of course, diversification takes time, and small banana producers may not benefit from it, while some live at the edge of poverty (e.g. in Dominica, St. Lucia). Direct, lump-sum income may be needed to bridge the transition phase. Local governments or local development agencies are in the best position for low-cost distribution of income deficiency payments to smallholder export producers. Trying to accomplish this goal by generic trade preferences is like using a battleship for killing mosquitoes.



Note: a) Of each \$5.30 cost to consumers \$3 flowed into marketing margins of EU marketers. About \$0.40 went into tax revenue and other internal EU transfers. Net costs to the EU are estimated to be \$1.90. About \$0.90 of this went into having bananas produced by relatively inefficient producers.¹³ Only \$1 formed an effective aid transfer to ACP counties (Borell, 1997a).

Trade preferences form a very ineffective device for transferring development assistance to ACP countries. Research by Borell and Yang (1992; 1997a; 1997b) showed that the EU banana regime was very ineffective in generating aid transfers to banana-dependent ACP countries. They calculated that, before the 1993 reform, EU consumers paid \$1610 mln (through high banana prices) to deliver \$302 mln of effective aid to 11 preferred supplier countries. In other words, it cost \$5.30 to deliver \$1 of net banana-related aid. The flow of funds is shown in Graph 4. After the 1993 reform, transfer efficiency of EU banana policy has even deteriorated: it now costs EU consumers \$13.25 to effectively transfer \$1 of benefit (Borell, 1997a; 1997b). EU marketers have been the main beneficiaries of the 1993 policy

¹³ E.g. yields per hectare in 1995 of Costa Rica, Ecuador and St Lucia compared as 5.6: 3.0: 1 (FAO 1998).

package. They realized marketing margins about double the size of what they are in the USA. From the perspective of the **EU's** development policy, the banana regime has proven to be an inefficient device for transferring aid to banana-dependent ACP countries. The costs of direct development aid to replace a possible loss of banana exports to the EU are moderate. The four ACP countries which depended most on banana exports to the EU (cf. Table 4) together export 125 **mln** ECU of bananas to the EU in 1995. The effective value of trade preferences represent only half this amount. Even if the EU would buy these country's entire bananas exports and dump it in the sea, this seemingly **wasteful** action would still create a large welfare gain compared to the present banana regime.

Conclusions. Preferential trade access for ACP countries and trade discrimination against dollar banana countries cannot be justified by differences in the development level of both country groups. With exception of four small Caribbean countries, ACP economies do not depend more on banana exports to the EU than dollar banana countries. No other economic characteristics of both country groups could be identified that warrant the present trade discrimination. Trade preferences for ACP banana exporters cannot be justified by the infant industry argument; their lack of competitiveness in the world banana market is not of a temporary character. Any positive externalities associated with banana exports can more efficiently be generated through direct aid. Direct development aid also forms a better way to promote diversification of exports and production structures of banana-dependent countries.

Banana trade and the environment

Most environmental effects of banana production are of a local scope, and do not cross national boundaries. It is not evident, therefore, that environmental effects of banana production should play a role in reform of international banana trade. Moreover, **WTO** rules do not allow for trade discriminatory measures based on environmental characteristics of the production process when these characteristic do not affect the banana product itself. This section argues, however, that there is a positive reason to include environment-related issues in a package deal to compensate potential losers of a liberalized European banana trade.

Environmental effects of production. Tree crops like bananas may offer valuable ecological services. When maturing, they protect soils against erosion in hilly areas, their shadow helps water conservation and humidity regulation, **while** they may provide a natural habitat for animals. The occurrence of such positive ecological services depends on production scale and production methods. Varied, inter-cropped production systems, like in large parts of smallholder banana production, are more likely to generate positive environmental effects than mono-crop production systems. **Monocrop** production of bananas in large areas is an ecologically vulnerable production system. High levels of chemical plant protection

inputs are needed to protect plants against insects, bacteria and **fungi**.¹⁴ Irrigation and fertilizers are amply used to boost crop yields.

Pesticides are applied through broad-spectre air-spraying and through pesticide-containing plastic bags put around the **racemes**. Airspraying affects all life forms in or near the banana plantations. It caused health problems for banana workers and their families: diseases, infertility, and lethal accidents. It also causes water pollution and other disturbance of local ecological balances. Effects may be felt beyond production regions, e.g. in coastal areas or through pesticide accumulation in migratory birds and fish (e.g. Colitt, 1994). Ever increasing pesticide quantities or pesticide toxicity are required as the abated organisms develop resistance. Pesticide use may be stimulated by subsidized pesticides, lacking penalties for negative externalities and inefficient application routines (e.g. inadequate disposal of pesticide-containing plastic bags). Heavy use of pesticides is partly caused by demand side conditions. Western consumers have got used to undamaged and unblemished fruits. Pesticides are seldom applied to non-export bananas, plantains and cooking bananas.

For construction of banana plantations large areas are deforested with strong temporary erosion **effects**.¹⁵ The wash water of banana packing plants **often** still contains agrochemicals residues, causing off-site water pollution. Finally, banana production generates huge amounts of organic waste (leaves, raceme stem, part of sub-standard bananas), some 3.5 ton for every ton of export bananas. Traditional dumps are open-air sites, often situated along river banks. The organic waste has a high biological oxygen demand leading to fish kill in surface waters. Also nondegradable waste like agrochemical containers and pesticide-impregnated plastic bags is created which often end up in open-air **dumps**.¹⁶

Banana trade and environment. An important new development is that consumer in OECD countries increasingly prefer 'green and clean' bananas, i.e. bananas without pesticide residues, produced in an environmentally sound and socially acceptable way. An EC-commissioned study by Eurobarometer in 1997 revealed that around three quarters of the Europeans would buy so-called 'fair trade' bananas,

¹⁴ One report from Costa Rica mentions: "Fertilizers, insecticides and herbicides are applied 22 times during the growth cycle [...]. In addition, 1.4 litre per hectare of fungicide is applied from airplanes 45 times in one growth cycle. Of this, 15% is lost to wind drift and falls outside the plantation; 40% ends up on the soil rather than on the plants; and approximately 35% is washed off by the rain. This results in a 90% loss of the estimated 11 mln. litres of fungicide, water and oil mix applied each year tot the banana production regions of Costa Rica" (Hernandez and Witter 1996: 175). On the ecological impacts of banana cultivation see inter *alia*: Dinham (1993); Hernandez and Witter (1996); IUCN (1992); Linnemann et al. (1993: 97-102); Slutzky (1994); Stover and Simmonds (1987); Wheat (1996).

¹⁵ According to Rude11 and Joper (1996) export production of agricultural commodities explains much of West-African deforestation in the 1970s. In Colombia and Ecuador, destruction of coastal tropical forests stems mainly from agricultural expansion spurred by export trade (cocoa, bananas, timber).

¹⁶ Organic waste could at least partially be used for animal feed and paper manufacturing, but these practices are not yet practiced on a wide scale. Banana multinationals in Central America have undertaken some attempts at plastic recycling.

grown under ethically-approved conditions in developing countries, provided that such bananas would be recognizably present in their shops alongside 'standard' bananas. A total of 37% of EU consumers said that they were prepared to pay a premium of 10% above the price of 'standard' bananas, for bananas grown in accordance with environmental and social standards laid down by bodies such as ILO and UN. A conservative EU estimate quantifies the 'fair trade' market segment at 300-400,000 tons per year, that is 8-10% of the total EU market.¹⁷ The fact that EU consumers have such outspoken preference for bananas which are produced in an environmentally sound way, forms a strong basis for an ecolabelling scheme for bananas. Some ecolabelling schemes for bananas, joined in EUROBAN, are already in operation in the EU.¹⁸ The change in consumer attitudes is illustrated by the rapid rise in market share (to 10%) of Max Havelaar 'Oké' bananas soon after their introduction in the Dutch market.

Ecolabelling creates a basis for product differentiation and price premiums for bananas that have been produced in an ecologically sound way. The existence of such price premiums creates new market opportunities for ACP bananas produced by smallholders under socially acceptable conditions and without intensive application of agrochemicals. If these aspects are included, productivity differences between large-scale produced bananas from dollar banana countries and smallholder bananas from the Caribbean will become smaller. The aforementioned estimate of the 'fair trade' market segment in Europe surpasses total ACP banana exports to the EU. Under a liberalized banana trade regime, the price premiums for eco-bananas will offer market shelter for exports produced by ACP smallholders. It is therefore essential to protect such market premiums for eco-bananas. For large banana companies the stakes are high. They wrestle with the change in preferences, since for them there are trade-offs between sustainability, productivity and profits.¹⁹

Ecolabelling schemes and the price premium they protect, can only survive with consumer confidence in their trustworthiness. Cheating and free-rider behaviour would eventually undermine credibility. Consumer goodwill also erodes when a confusing jumble of competing ecolabels arises. Large banana companies already tied to jump on the bandwagon of the 'fair trade' movement. The initial success of banana ecolabels in carving out niche market price premiums induced Chiquita in 1995 to start its 'ECO-OK' ecolabel programme directed at certification for its Costa Rican plantation, although the label completely disregards agrochemical use (Van de Kastele, 1997). If cleverly marketed, such labelling initiatives might cause confusion and eventually undermine consumer trust in ecolabels.

¹⁷ Source: European Commission Press Release, 27 November 1997.

¹⁸ See Douglas (1996); WINFA (1997); Chambrun and Smith (1998).

¹⁹ Del Monte manager Murray recently stated: "We definitely feel that ethical production is the key to keeping us in business", recognising a customers demand for sustainably produced bananas (Wilson 1998).

Protection of the niche market for premium eco-bananas makes it essential that issuing and monitoring of ecolabels is kept completely apart from the operators who trade in ecolabelled bananas. Ecolabelling for bananas preferably should be done by an independent organization which is acceptable for the entire banana industry. Next section explores the idea that this could become part of an international package deal for a liberalized banana trade.

Conclusions. Most dollar bananas come from pesticide-intensive large plantations, while most Caribbean (ACP) bananas stem from smallholder production where production is more environmentally sustainable. WTO rules preclude the use of trade discrimination on the basis of this difference. Voluntary, market-supported developments offer better perspectives for the future. The sharp rise in environmental consumer consciousness creates a substantial niche market for eco-bananas with price premiums that at least partially compensate for higher production costs of smallholder banana production from ACP countries. In the longer term, large banana companies can be expected to enter this market. ACP bananas will only keep their market position if they succeed in strengthening their overall production efficiency. Ecolabels and market premiums for ecobananas can be a dynamising instrument for achieving an overall change in the industry towards environmentally sound production methods. In the short term, ecolabelling schemes could be an important element in a package to compensate potential losers of liberalized banana trade.

The role of an International Banana Agreement

Reform of the EU banana policy has become unavoidable for several reasons. The EU has agreed to modify its banana import policy in order to comply with the decision of the **WTO's** Appellate Body. The EU's first proposals did not indicate a decision to liberalize banana imports. WTO-incompatible elements of the present import licensing scheme will be adapted, but ACP trade preferences remain intact. A more profound change might come when the Fourth **Lomé** Agreement and its Banana Protocol expire.*' The European Commission is proposing a successor agreement which makes a distinction between countries which are and those which are not capable of rapidly integrating into the world economy. While supporting the former group's capabilities to integrate in the world market, the latter group will be eligible for poverty-focused development assistance (European Commission 1996). Generic trade preferences for all ACP countries would not fit into this approach. With regard to bananas, this section sketches a policy alternative that could well fit into this new line of thinking.

²⁰ Article 1 of the Banana Protocol states: "In respect of its banana exports to the Community markets, no ACP State shall be placed, as regards to its traditional markets and its advantages on those markets, in a less favourable situation than in the past or at present." The Appellate Body of the WTO rejected that the current EU banana regime can be defended on basis of this article (WTO 1997).

A new International Banana Agreement forms the **core** of the proposal. The proposal for an International Banana Agreement is based on the following considerations:

- I. Liberalization of banana trade creates gains for several market players: EU consumers, governments of dollar banana countries, US government; multinational banana companies.
- II. All importing and exporting countries would benefit from promotion of banana consumption, improved banana market efficiency and improved trade statistics. All market parties gain **from** preserving consumer trust in bananas as a product, including aspects like healthiness and taste, and confidence that bananas are produced under acceptable ecological and social minimum **conditions**.
- III. Compensation of potential losers of trade liberalization is made easier when part of smallholder ACP banana production can be sold under a banana ecolabelling scheme that provide a price premium to compensate for higher production costs.
- IV. Compensation remaining losses for is easier done on a burden-sharing basis by all potential winners. It creates mutual goodwill and speeds up the liberalization procedure. The USA has already declared its willingness to co-operate with the EU in this area, in the light of its **non-**banana interests in the Caribbean region (**USTR**, 1996).
- V. Safeguarding price premium for eco-bananas depends on a the presence of a simple and reliable ecolabel issued by an independent, high-standard international organization.

An International Banana Agreement. The aforementioned issues could be promoted by an International Banana Organization, functioning under the umbrella of an International Banana Agreement. The latter would be an agreement between governments to regulate common interests with regard to banana production, trade and consumption. The agreement is created for an agreed time period (e.g. 5 years), with the possibility of renewal. The agreement aims at reconciling a commitment to free trade, ecological sustainability of banana production and **socio-economic** development interests of banana-exporting countries. The International Banana Agreement would only govern international trade *in* bananas of the *Cavendish* variety, which is the dominant export banana. Member countries periodically convene to initiate programmes for implementation of the goals of the agreement and to assess progress with regard to ongoing projects. The agreement needs a secretariat, called the **International Banana Organization (IBO)**, which implements and prepares decisions of the council of member countries. Box 1 identifies a number of specific tasks for the IBO. The IBO needs not become a large organization. Specific projects and monitoring tasks can be done on a contracting basis by external organizations and consultants.

Operating modalities of the International Banana Agreement can only be worked out in negotiations between potential member countries. FAO **and/or** UNCTAD offer the most appropriate international platform for preparing the agreement, through consultation with potential member countries, preparation of a negotiation document, and a multi-country negotiation roundtable.

Box I: Potential task areas for the International Banana Organization

- * Management of a Smallholder Competitiveness Fund which provides cheap loans to governments and small-farmer co-operatives from developing countries for projects which aim at strengthening production efficiency and market competitiveness. Qualification criteria and operating modalities have to be worked out.
- * Management of a Banana Diversification Fund providing low-interests loans and gifts to governments of high-cost, high-dependency export countries for projects to diminish their structural dependence on banana exports
- * Create and promote a credible international ecolabel for bananas: guarantee a universal banana ecolabel, issue certificates of origin for certified producers, periodical monitoring of certified producers.
- * Management of a Banana Environment Fund formed by voluntary contributions by member countries, private companies and international organizations.*²¹ It provides cheap loans for capital-short national banana producers in developing countries which want to convert their traditional production methods into more environmentally sound production methods, but which have no access to commercial credit to finance the necessary investments. Project proposals have to be endorsed by the member country's government, and repayment is conditional upon performance. Further qualification criteria and operating modalities have to be worked out.
- * Promotion of international banana consumption and ecologically sustainable banana production
- * Provide consistent statistics on international banana production, trade and consumption.
- * Responsibility for regular daily relations with member countries and international organizations (UNCTAD, FAO, Common Fund for Commodities, EU, World Bank, Caribbean Banana Exporters Association, etc.).
- * Offer a platform for periodic consultation with environmental and development **NGOs** and private sector representatives
- * Operate as secretariat for the member country council.

²¹ A similar environment fund, based on voluntary contributions by member countries, was founded under the International Cocoa Agreement in 1997.

The agreement enters into operation when a sufficient number of governments have committed themselves and have ratified the agreement. The required minimum country participation can be formulated in terms of X % of world imports (e.g. 60%) and Y % of world exports (e.g. 60%) in a reference year. Participation of large import markets like the USA, EU and Japan would greatly improve the chances of success.

The International Banana Agreement could operate under the auspices of UNCTAD, like in the case of other international commodity agreements. It would also become associated with the UN's Common Fund for Commodities which has separate financing facilities for projects that boost the position of production countries in marketing and distribution of primary **commodities**.²²

Positioning of involved parties For the EU, liberalization of its EU banana imports would even be beneficial without an International Banana Agreement. The latter's Smallholder Competitiveness Fund and Banana Diversification Fund make it possible to realize EU policy goals through a joint effort with other importing countries. Moreover, the agreement makes it possible to deal simultaneously with environmental issues through the Banana Environment Fund and the ecolabelling scheme. The EU could transfer part of its current **Lomé** obligations to the new **IBO**.²³

Potential gains are to be achieved for those parties which in the past refused to participate in an International Banana Agreement: export countries, the USA and large banana companies. The new agreement does not, however, aim at market and price intervention (e.g. by quota systems), while ecolabel scheme is voluntary one. The prospect of free trade in bananas and free entry to the European market makes co-operation by these players much more likely. The US could bring part of its Caribbean development policies under the new agreement. Some Latin American countries may have initial reservations because of the possible initial impact of the ecolabelling scheme on their exports of 'standard' bananas. The scheme is however a voluntary, consumer-driven one, and private banana companies in their countries may wish to participate because of the potential price premium that can be earned. There is strong evidence that sticking to old-fashioned, 'dirty' production methods leads to future backwardness and competition **disadvantage**.²⁴ **Kaimowitz** (1996) has shown that environmental policy innovation in Latin America was often induced from abroad. However, the strongest incentive for Latin American countries to participate will be the additional export opportunities arising after EU import liberalization.

²² The funding mandate of the Common Fund allows for projects to improve the environmental record of banana production, diversification programmes, and programmes to improve competitiveness of smallholder production of bananas.

²³ The agreement does not rule out the EU's (or any other participating government's) possibilities to undertake additional bilateral and more concessional development assistance programmes in the countries concerned.

²⁴ Porter and Van der Linde (1995); Pimentel et al. (1993); Whittaker et al. (1995); UNCTAD (1996b).

Caribbean countries can be expected to have strong initial reservations against conclusion of the new International Banana Agreement. However, once it exists, they will be better off by joining the agreement. Membership makes them eligible for the agreement's funding of investments in alternative production and export sources. African ACP countries have less reasons for opposing the new agreement than Caribbean countries could have. They are not very dependent on banana exports and might be among the main beneficiaries of the competitiveness assistance **fund** and the ecolabel **program**.²⁵ African countries could benefit from increased world demand after banana trade has been liberalized.

Consumer information under an International Banana Agreement. The agreement can become a strong stimulus for environmental innovation in the banana sector, both through its Banana Environment Fund and through its ecolabel scheme. An ecolabelling scheme issued under auspices of the agreement preferably has to be supported by all member countries. Even though it is voluntary, the ecolabel's position is strengthened when member production countries endorse the ***IBO ecolabel's*** qualification standards. Rather than starting with full-fledged, high-profile one might start by defining common *minimum* standards for qualification. Minimum environmental standards might be adapted from those used by **Euroban**: biodiversity (protection of natural areas), pesticides and nutrients (documentation, control and reduction); prevention of erosion and water pollution; reduction of solid waste (control, composting, re-use). Over time, the member country council may decide on tightening certification standards of the IBO ecolabel.

A strong IBO-supported ecolabel for bananas will secure a price premium for banana produced in an ecologically-sound way. In the short term, this will offer market opportunities for smallholder banana producers from high-cost export countries. **In the longer term**, the ecolabel will support an overall upgrading of environmental standards and working methods in the banana sector.

Final remarks

Some parties in the EU banana conflict adopt a backward-looking perspective, taking pre-1993 positions as their point of departure. The present EU banana regime, apart from its often-contested drawbacks, has the large advantage that it created a common benchmark situation for all EU countries. For the first time since Rome Treaty was negotiated, colonial histories can no longer paralyze discussion between EU-members. The present EU banana import regime has been defended by

²⁵ For instance, in the Ghanaian Volta River region a plantation has been set up as the first plantation in Africa that will operate according to 'fair trade' production criteria (Banana Trade News Bulletin, No. 11112, November 1997).

development-related arguments. The paper has however shown that these can no longer support the discriminatory EU trade regime for bananas. Other relevant changes since the early 1990s include the increased WTO-membership of banana-producing countries, and the increased consumer attention for environmental and social conditions in banana production. All these changes in policy variables make it possible now to look forward to future welfare benefits which become possible by changes in the *present* EU banana regime.

The largest gains from EU trade liberalization will be booked by European consumers, followed by competitive world market producers in dollar banana countries, and multinational banana companies. Most short-term losses will be borne by high-cost Caribbean smallholders and privileged European traders. The group of most-affected Caribbean export producers is limited in size, which makes it relatively easy to compensate them. The compensation package can be given the form of a new International Banana Agreement that reconciles a commitment to free trade in bananas, promotion of sustainable banana production and promotion of **socio-economic** development in banana-exporting countries.

Annex tables

Table AI *German welfare losses due to 1993 change in EU banana regime*

<i>Source</i>	<i>Method</i>	<i>Estim. welfare loss German consumers</i>	<i>Welfare change other 'players' in Germany</i>
Guyomard et al. (1996)	Simulation with static partial equilibrium model. Elasticities partly estimated (Denmark, France, Italy and UK), partly assumed, partly from literature. Reference prices 1989-91. Deficiency payments neutralize effect on EU banana producers. Constant margins between import c.i.f. prices and export fob prices assumed.	106 mln US\$ (91 mln. ECU)	
iermann & Tölke (1996)	Simulation for 1994 with static partial equilibrium model. Estimated price and exchange rate transmission elasticities for period 1960-92.	677 mln US\$ (1079 mln DM)	+ 506 mln DM by German import traders. + 217 mln DM by other European import traders. + 221 mln DM EU tax revenue.
Read (1995)	Simulation with static partial equilibrium model. Model structure and assumptions unpublished. Prices are 1991 EC import unit values.	157 mln US\$	
3orell (1997)	Simulation with static partial equilibrium model. Elasticities partly estimated, partly assumed	800 mln US\$	

Table A2 *Estimates of welfare costs of European banana regime (before and after 1993) compared with free trade in bananas^{b)}*

Source	Method	Comparison before/ after 1993	Welfare costs for EU consumers	Net welfare costs for EU:
Borell and Yang (1990)	Simulation with static partial equilibrium model. Elasticities assumed. German 1987 consumer price level taken as free market price.	before 1993 banana regime	693 mln US\$	386 mln. US\$ (after accounting for budget effects)
Matthews (1992)	Simulation with static partial equilibrium model. Elasticities assumed on basis of prior studies. Calc. based on 1989 prices	before 1993 banana regime	579 mln US\$	515 mln US\$ (after accounting for lost EU rents and budget effects)
Borell and Cuthbertson (1991), quoted in Matthews (1992)	Simulation with static partial equilibrium model. Elasticities assumed. US 1987 consumer price plus aver. 1979-90 premium in German market over US market taken as free market price.	before 1993 banana regime	1438 mln US\$	442 mln US\$ (after accounting for lost EU rents and budget effects)
Borell and Yang (1992)	Simulation with static partial equilibrium model. Elasticities assumed. Based on putative retail prices, incl. distribution and retail margin	before 1993 banana regime	1610 mln US\$ at 1990 prices (386 mln US\$ at 1987 prices)	575 mln US\$ at 1990 prices
McInerney and Peston (1992) ^{a)}	Simulation with static partial equilibrium model.	before 1993 banana regime	approx. 1600 mln US\$	approx. 575 mln US\$
Read (1994)	Simulation with static partial equilibrium model. Model structure and assumptions unpublished. Prices are 1991 EC import unit values.	before 1993 banana regime	642 mln US\$	115 mln US\$ (after accounting for budget effects)
Borell (1994)	Simulation with static partial equilibrium model. Retail prices, incl. distribution and retail margin. German price as free market price	after 1993 banana regime	2300 mln US\$ (before regime change: 1600 mln US\$)	
Euro PA (1995)	Simulation with static partial equilibrium model. Retail prices. Same elasticity assumptions as Borell (1994)	after 1993 banana regime	800 - 1000 mln US\$	

Note: **a)** quoted in Hallam and Peston (1997). **b)** Applied estimation methods, data sources, discussion of data quality and precise econometric results are sometimes kept hidden from readers, e.g. Read (1994), Matthews (1994).

References

- Anon. (1992) '**Informacion** base sobre case presentado ante Secundo Tribunal Intemacional **del** Agua contra el Standard Fruit Company', San Jose, Febrero 1992.
- Borell, B. (1997a) 'Policy making in the EU: the EU bananarama story, the WTO and policy transparency', *Australian Journal of Agricultural and Resource Economics*, vol. 41 (2).
- Borell, B. (1997b) 'Well within reach - a low cost way to comply with the WTO banana decision using tariffs', Australian Centre for International Economics, Canberra.
- Borell, B. (1994) 'EU Bananarama III', Policy Research Working Paper No. 1386, World Bank, Washington.
- Borell, B. and M. Yang (1992) 'EC Bananarama 1992 - The Sequel: The EC Commission Proposal'. WPS No. 958, International Economics Dept., World Bank, Washington.
- Borell, B. and S. Cuthbertson (1991) 'EC Banana Policy 1992: picking the best option', Centre for International Economics, Canberra.
- Borell, B. and M. Yang (1990) 'EC Bananarama 1992', WPS No. 523, International Economics Dept., World Bank, Washington.
- CBEA (1997/98) 'CBEA On-line', Website of the Caribbean Banana Exporters Association (<http://www.cbea.org>).
- Chambron, A.-C. and A. Smith (1998) 'Bananas: paradise or jungle?', in *Fair Trade Yearbook 1998* (Dutch edition) European Fair Trade Organisation, Maastricht, pp. 83- 10 1.
- Colitt, R. (1994) 'Banana fungicide poisoning Ecuadorian shrimps', *Financial Times*, March 3rd.
- Deardorff, A (1994) 'Third-country effects of a discriminatory tariff', *The World Economy*, vol. 17 (2).
- Deodhar, S.Y. and I.M. Sheldon (1995) 'Is foreign trade (im)perfectly competitive? - an analysis of the German market for banana imports', *Journal of Agricultural Economics*, vol. 46 (3), pp. 336-48.
- Dinham, B. (1993) *The pesticide hazard - a global health and environmental audit*, Zed Books. London.
- Douglas, J. (1996) 'What is meant by a fair trade banana?', in *TRAIDE Briefing, No. 4*, November 1996. Utrecht.
- Ellis, F. (1983) *Las transnacionales del banano en Centroamerica*, Editorial Universitaria Centroamericana. San Jose.
- Euro PA and Associates (1995) 'Commentary and analysis on the EU Banana Regime', R81 A, Euro PA and Associates, Cambridgeshire.
- European Commission (1996) 'Green Paper on relations between the European Union and the ACP countries on the eve of the 21st century: challenges and options for a new partnership', EU. Brussels.
- Eurostat (1997) 'External trade of the European Union with the ACP countries and the OCTs 1992-96', Statistical Office of the European Communities, Luxemburg.
- FAO (1996) 'Banana diversification: major issues and constraints', Committee on Commodity Problems. Intergovernmental Group on Bananas, FAO, Rome.
- FAO (1998), FAOSTAT: statistical database, available at <http://apps.fao.org>, retrieval date 30/3/1998, Rome.
- Fosu, A.K. (1996) 'Primary exports and economic growth in developing countries', *The World Economy*, vol. 19, pp.465-74.
- Guyomard, H., C. Laroche and Ch. Mouél (1996) 'An economic assessment of the common market organisation for bananas in the European Union', Institut de la Recherche Agronomique (INRA), Rennes.
- Hallam, D. and M. Peston (1997) 'The political economy of Europe's Banana Trade', Occasional Paper no. 5, Dept. of Agricultural and Food Economics, University of Reading Reading.
- Hermann, R and J. Tölke (1996) 'Ausgerechnet Banane.. : Ökonomische Effekte der EU-Bananemarktreform auf den Bananenmarkt in Deutschland', *Spiegel der Forschung*, Jg. 13 (2).
- Hernandez, C.E. and S.G. Witter (1996) 'Evaluating and managing the environmental impact of banana production in Costa Rica: a systems approach', *Ambio*, vol. 25 (3), May, pp. 171-178.
- IUCN (1992) 'Evaluation of the social and environmental impact of the banana expansion in Sarapiquí, Tortuguero and Talamanca'. in *The world of bananas - Background document WINFA seminar on Fair Trade, 12-13 August 1997*, WINFA, Norwich.
- Kaimowitz, D. (1996) 'The political economy of environmental policy reform in Latin America', *Development and Change*, vol. 27, pp. 344-52.
- Kastele, A. van de (1996) 'The banana production chain', Food World / IUF. Maarssen.
- Kox, H. (1997) 'A note on primary exports and growth', Development Economics Seminar Paper No. 97-3/1, Institute of Social Studies, The Hague.

- Krugman, P. and M. Obstfeld (1994) *International economics: theory and policy*, Harper-Collins, Third edition, New York.
- Linnemann, H., H. Kox, C. van der Tak and H. de Vries (1993) 'Preconditions for International Commodity-Related Environmental Agreements • Results of a pre-feasibility study', Working Paper ICREA Project, Free University, Amsterdam.
- Lowe, M. (1996) 'EU-Caribbean relations after 2000'. Paper presented for Caribbean Council for Europe (November 1995), *Capitulos*, SELA 10, 1996.
- Lowe, Ph. (1998) 'EU helping banana producers adapt', Letter published in *Financial Times*, 21 January.
- Matthews, A. (1992) 'The European Community's banana policy after 1992', Discussion Papers in Agricultural Economics No. 13, University of Giessen, Giessen.
- McInerney, J. and M. Peston (1992) 'Fair trade in bananas?', Report No. 239, University of Exeter.
- Mokhiber, R. and A. Wheat (1995) 'Chiquita's top banana', *Multinational Monitor*, December.
- OECD (1996) *Development Co-operation • Development Assistance Committee Report 1996*, OECD, Paris.
- OECD (1997) *Geographical distribution of financial flows to aid recipients 1992-1996*, OECD, Paris.
- Pimentel, D. et al. (1993) 'Environmental and economic effects of reducing pesticide use in agriculture', *Agriculture, ecosystems and environment*, vol. 46, pp. 273-88.
- Porter, M.E. and C. van der Linde (1995) 'Toward a new conception of the environment-competitiveness relationship', *Journal of Economic Perspectives*, vol. 9 (4), 97-114.
- Read R (1994) 'The EC internal banana market: the issues and the dilemma', *The World Economy*, vol. 17 (2), pp. 219-35.
- Ross-Robinson, H. and Associates (1997) 'The U.S. and Chiquita at the W.T.O.', Ross-Robinson and Associates, Washington.
- Rudel, T. and J. Roper (1996) 'Regional patterns and historical trends in tropical deforestation', 1976-1990: a qualitative comparative analysis', *Ambio*, vol. 25 (3), pp. 160-166.
- Sachs, J. and A. Warner (1995) 'Natural resource abundance and economic growth', Development Discussion Paper No. 517a, Harvard Institute for International Development, Harvard University, Cambridge.
- Stover, R.H. and N. Simmonds (1987) *Bananas*, Longman, London
- Verburg, A. (1998) 'Banana's: a slippery subject', Faculty of Economic Sciences and Econometrics, Dept. of Development Economics and Agricultural Economics, Free University, Amsterdam.
- UNDP (1997) *Human Development Report 1997*, Oxford University Press, New York / Oxford
- UNCTAD (1996) *Commodity Yearbook 1995*, UN, New York.
- UNCTAD (1996) *Handbook of international trade and development statistics 1995*, UN, New York.
- UNCTAD (1996b) 'The relationship of environmental protection to international competitiveness, job creation and development', Paper for the Commission on Sustainable Development, Fourth Session, CSD, New York
- USTR (1996) 'The banana issue', Declaration by the Office of the United States Trade Representative, 23 December 1996 (website <http://www.ustr.gov/reports/banana1996/>).
- Wheat, A. (1996) 'Toxic bananas', *Multinational Monitor*, September 1996.
- Whittaker, G. et al. (1995) 'Restricting pesticide use: the impact on profitability by farm size', *Journal of Agricultural and Applied Economics*, vol. 27 (2), pp. 352-62.
- WINFA (1997) 'The world of bananas', Background document WINFA seminar on Fair Trade, 12-13 August 1997, WINFA, Norwich.
- World Bank (1996) *World Development Report 1996*, Oxford University Press, New York
- World Bank (1997) *World Development Indicators 1997*, World Bank, Washington.
- World Trade Organisation (1997) 'European Communities • regime for the importation, sale and distribution of bananas', AB-1997-3, Report of the Appellate Body, Document WT/DS27/AB/R, WTO, Geneva.